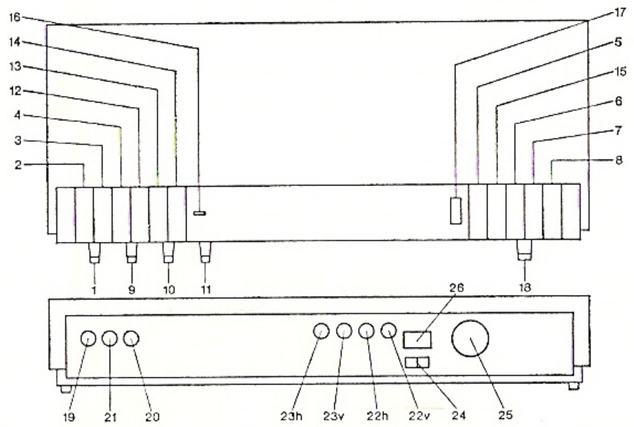
BRIEF OPERATING INSTRUCTIONS



Before connecting your receiver to the mains make sure that is has been switched to the mains voltage (25) you have available.

(1) **VOLUME CONTROL:** Set this knob so that the arrow points upwards and to the left.

(2) **ON/OFF SWITCH:** To switch on the set, depress this button. To switch off, press the same button lightly, thereby releasing it.

(3) **SPEAKER:** With this button depressed, the speakers connected to sockets (22 h) and (22 v) will operate.

(4) **EXTENSION SPEAKER:** With this button depressed, extension speakers connected to sockets (23 h) and (23 v) will operate.

FUNCTIONS:

FM

(5) **FM BAND:** Depress this button. Tune in the desired station with tuning knob (18). Depress the -AFC button (15) and retune for zero (centre) indication

of the radicator pointer (17) (see later under "RADICATOR"). The FM aerial should be connected to socket (24).

(6) **GRAMOPHONE:** With this button depressed, the amplifier section of the receiver is connected to socket (20). Record players such as B & O type BEOGRAM 1000 VF should be connected to this socket.

(7) **GRAMOPHONE:** With this button depressed, the amplifier section of the receiver is connected to socket (21). BEOGRAM 1000 V or BEOGRAM 3000 record players should be connected to this socket.

(8) **TAPE RECORDER:** With this button depressed, the receiver will play back from a tape recorder connected to socket (19). - (See then section "CONNECTING A TAPE RECORDER" for how to make tape recordings).

(9) **BASS CONTROL:** Turning this knob clockwise will increase the bass range.

(10) **TREBLE CONTROL:** Turning this knob clockwise will increase the treble range.

(11) **BALANCE:** This knob should be set for equal volume from the two speakers.

(12) **RUMBLE FILTER:** With this button depressed, the lowest frequencies will be attenuated, thus minimizing any rumble that may be caused by the gramophone motor.

(13) **NEEDLE-TALK FILTER:** With this button depressed, needle talk from worn gramophone records will be reduced.

MONO

(14) **MONO:** This button should be depressed if there is only one speaker in the room in which a stereo gramophone record is to be played.

-AFC

(15) **AUTOMATIC FREQUENCY CONTROL:** This button is used for accurate tuning (see below under "RADICATOR" for additional information).

(16) **STEREO INDICATOR**

(17) **RADICATOR:** The radicator pointer should be at mid-scale (zero) when the receiver is tuned to a station.

(18) **FM TUNING**

EXTERNAL CONNECTIONS:

(19) **TAPE RECORDER SOCKET:** See below.

(20) **GRAMOPHONE SOCKET:** For crystal pick-up or magnetic pick-up with pre-amplifier.

(21) **GRAMOPHONE SOCKET:** For magnetic pick-up without pre-amplifier. For details see below.

(22) **SPEAKER SOCKETS:** For left and right speakers.

(23) **SPEAKER SOCKETS:** For extension speakers, left and right.

(24) **FM AERIAL SOCKET.**

(26) **HOLDER FOR V-AERIAL:** Your receiver is designed for use with a type 2010 telescoping V-aerial. This aerial will usually provide satisfactory reception in strong-signal areas (close to a transmitter). If not, you should see your dealer about installing an outdoor directional aerial.

RADICATOR:

Your receiver uses an entirely new type of tuning meter. This meter, known as a radicator (pointer instrument), is of the zero centre type. Zero reading indicates that the receiver detector is in perfect balance, an important point for correct, distortionless reproduction, especially when receiving stereo broadcasts.
When the receiver is not tuned to a station, the radicator pointer will be at mid-scale (zero). To tune, first depress the -AFC button, thus cutting out the automatic frequency control circuit; then tune to the desired station. As you do this, the radicator pointer will first deflect to one side, depending on which direction you are tuning from; then continue tuning until the pointer is back at zero. Now depress the -AFC button again, and the automatic control circuit will thereafter assure correct reproduction.
When tuning in a weak or distant station adjacent to a strong one you may find it necessary to cut out the automatic frequency control circuit (depress the -AFC button).

STEREO INDICATOR:

(16) will show light with the receiver switched for reproduction from a tape recorder or gramophone, unless the MONO button (14) is depressed.
If your receiver is provided with a stereo decoder (see under "STEREO BROADCASTS"), the indicator will show a light as you tune in a station from which a stereo broadcast is in progress.

BALANCE ADJUSTMENT:

Once adjusted correctly, this control normally need not be touched. Adjustment is performed as follows:
Slowly rotate the balance potentiometer (11) until you have balanced reproduction — that is, you will have equal volume from the two speakers when playing a monaural record with the set switched for either „stereo" or „mono".
On monaural reproduction the two channels are connected, but

the balance control is operative and should be adjusted for equal volume from the two speakers.

STEREO REPRODUCTION:

Stereophonic sound is reproduction through two or more separate amplifiers (channels) with speakers. When you are seated in the concert hall, you hear the sound stereophonically, which means that it is spatial, with both width and depth. In other words, you can feel where every single instrument is — violins, double-bass, woodwinds, etc. Stereo makes you feel os if you were actually present in the concert hall. — MONO (or MONAURAL) sound reproduction is the conventional system using only one channel or a number of channels all of which reproduce the same signal.

STEREO BROADCASTS:

Your BEOMASTER 1000 is prepared for stereo broadcast reception. A type 0001 stereo decoder may be supplied and installed by your dealer (if not already installed).
You may use a stereo decoder if you live reasonably near an FM station which transmits stereo programmes. Your dealer can advise you in this matter.

SPEAKER OUTPUT SOCKETS:

Your BEOMASTER 1000 has two pairs of speaker output sockets. Speakers are cut in and out with the buttons marked ⊏| and ⊏||
Care should be taken when connecting the speakers that they are identically polarized. This will be the case if B & O speakers are used, but the polarity should be checked if speakers of other makes are used or if the speaker wiring is otherwise altered.
The importance of correct polarity may be explained as follows: The diaphragm of a speaker moves back and forth in time with the electrical vibrations. If two speakers are connected to the same output it is possible that the diaphragm of one speaker may move forward as the diaphragm of the other moves backwards. If the speakers are placed close together, this will affect the reproduction adversely, especially the bass notes, which will be considerably attenuated. If you reverse the connections to one speaker, both diaphragm will operate in the same direction, and correct reproduction will be obtained. Correct speaker polarity is of great importance for proper reproduction of both stereo and monaural programmes. Place the two speakers close together and facing each other. Play some monaural music so that you have the same programme on both speakers. By reversing the connections to one of the speakers you will be able to hear when you have the correct polarity.

If several loudspeakers are to be connected, they must not be arranged parallel, as the output stages will then be loaded with too low an impedance. A combination of parallel- and series connection is preferable to obtain an impedance of 3—5 ohms.
It is not advisable to connect a loudspeaker simultaneously to another output stage e.g.a. TV-receiver. The left and the right loudspeakers should never have the same neutral wire.

SPEAKERS:

We recommended B & O type BEOVOX 1500 or BEOVOX 2400 speakers, which permit full utilization of the high undistorted output capability of the BEOMASTER 1000. A somewhat smaller speaker, type BEOVOX 1000, is well suited for even very loud volume levels in ordinary rooms.
CAUTION:You are warned not to run your receiver at full power output with small speakers connected to it as this may result in damage to the speakers.

GRAMOPHONE INPUT SOCKETS:

Your BEOMASTER 1000 has two gramophone input sockets, ∅| and ∅||. — ∅| This gramophone input socket is intended for a

record player with a crystal pick-up, or a record player with a magnetic pick-up and built-in pre-amplifier such as B & O type BEOGRAM 1000 VF.

⌀II This Gramophone input socket is identical with ⌀I except that the receiver has a built-in pre-amplifier, which makes it possible to connect a magnetic pick-up equipped record player which does not have a built-in pre-amplifier such as BEOGRAM 1000 V and BEOGRAM 3000.

MICROPHONE AMPLIFIER:

Your dealer can modify the afore-mentioned gramophone pre-amplifier for use as a microphone pre-amplifier, for such microphones as B & O types BM 5, BM 6, and MD 8.

CONNECTING A TAPE RECORDER:

Your BEOMASTER 1000 is designed for operation with tape recorders based on German DIN standards, such as the BEOCORD 2000 DE LUXE or BEOCORD 1500 DE LUXE.
A type 0961014 adaptor (obtainable at your dealer's) is required for making the connection.

RECORD:

When the receiver and the tape recorder have been connected by means of the 961 L 14 adaptor, the gramophone or radio programme can be recorded on the tape recorder simultaneously. The volume, bass, and treble controls of the receiver do not affect the recording. The MONO push-button should be released when recording from stereo gramophone records.

PLAYBACK:

To play back recordings through the amplifier section of the receiver, depress the button marked ○○.
The volume and tone controls of the receiver are now operative.

TECHNICAL DATA

DIMENSIONS AND WEIGHT	**Dimensions:**	505 mm wide, 87 mm high, 254 mm deep.
	Weight:	5,5 kg.
SUPPLY VOLTAGE	**Voltage:**	110 - 130 - 220 - 240 volt AC.
	Frequency:	50—60 c/s.
	Power Consumption:	20—120 watts.
CONNECTIONS	**Inputs:**	Gramophone I: 500 k ohms — 200 mV/1000 c/s. Gramophone II: 40 k ohms — 4 mV/1000 c/s. Gramophone rewired for microphone: Pre-amp. type 2004: 200 ohm—100 μV/1000 c/s. Tape recorder: 500 k ohm — 200 mV/1000 c/s. Aerial: 75 — 240 ohm.
	Outputs:	2 pairs of loudspeakers, 2×4 ohm. Tape recorder: 82 k ohm — 100 mV/1000 c/s.
TUNING	**Wave bands:**	FM 88 — 108 Mc/s.
	Sensitivities:	FM 2 μV for 26 dB signal-to-noise ratio.
	Intermediate frequency:	10.7 Mc/s. — 10 circuits.
	High frequency:	3 tuned circuits and oscillator.
	Tuning:	Large radicator.
AMPLIFIER	**Power output:**	2×15 watts continuous, 2×20 watts music power.
	Frequency range:	30—25000 c/s. ± 2 dB.
	Distortion:	< 1% at 40 c/s. — 1 kc/s. — 12,5 kc/s./15 W.
	Signal/noise ratio:	60 dB at max. excitation. 50 dB at 50 mW.
	Tone controls:	Bass control: + 10 dB — 17 dB at 60 c/s. Treble control: + 12 dB — 16 dB at 12,5 kc/s.
	Channel separation:	Gramophone I: 40 dB at 1 kc/s., 30 dB at 12,5 kc/s.
EQUIPMENT ACCESSORIES	**Transistors:**	30 pcs.
	Aerial:	Type 2010.
	Stereo decoder:	Type 0001.

Specifications subject to change without notice.